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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/061,441	04/16/98	WILZ	L 38292R1

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EXAMINER

LEGREE, T

ART UNIT	PAPER NUMBER
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2744

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DATE MAILED:

03/29/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/061,441

Applicant

WILZ

Examiner
Tracy M. Legree

Group Art Unit
2744



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-20 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-6, 9-13, and 17 is/are rejected.

☒ Claim(s) 7, 8, 14-16, and 18-20 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 3, line 16, --be-- should be inserted after "may".

On page 4, lines 2-5, the U.S. Patent No. referred to appears to be incorrect. Presently, applicants disclosure refers to "U.S. Patent No. 5,483,767 issued on January 9, 1996". U.S. Patent No. 5,483,767, however was issued on January 16, 1996 and is entitled "Method And Apparatus For Locating Fish".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 6 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, lines 2-3, the statement "...said selector for amplifying signals received by the second antenna." is unclear. Does the selector amplify the signals received by the second

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antenna or does the third amplifier amplify the signals from the second antenna? (For the purpose of the Office Action, the Examiner assumes that the third amplifier amplifies the signals from the second antenna.)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claims 1-3 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Rich, U.S. Patent No. 5,940,452.

Regarding claim 1, Rich discloses a communications transceiver, comprising :

a first antenna (114) connected to a first amplifier (135); (Figure 1; col. 5, lines 1-6)

a second antenna (116) connected to a second amplifier (139); (Figure 1; col. 5, lines 1-6)

an intermediate frequency, IF, stage (141); (Figure 1; col. 5, lines 34-36) and

a first switch (118) and a second switch (120), the combination of which reads on selector, being connected between the first and second amplifier and the IF stage for selecting operation of the communications transceiver between the first and second antennas. (Figure 1; col. 5, lines 25-27; col. 9, lines 18-36)

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Regarding claim 2, Rich discloses all the limitations of claim 1 and further discloses the communications transceiver wherein the first amplifier is an input amplifier for amplifying signals received by the first antenna. (Figure 1; col. 5, lines 1-6)

Regarding claim 3, Rich discloses all the limitations of claim 1 and further discloses the communications transceiver wherein the second amplifier is an input amplifier for amplifying signals received by the second antenna. (Figure 1; col. 5, lines 1-6)

Regarding claims 9 and 10, Rich discloses all the limitations of claim 1 and further discloses the communications transceiver further comprising a BPF (133) disposed between the first antenna and the first amplifier. (Figure 1; col. 5, lines 17-19)

Regarding claims 11 and 12, Rich discloses all the limitations of claim 1 and further discloses the communications transceiver further comprising a BPF (137) disposed between the second antenna and the second amplifier. (Figure 1; col. 5, lines 19-22)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1, 2, 4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moe et al. (hereafter Moe), U.S. Patent No. 5,239,685.

Regarding claim 1, Moe discloses a communication transceiver, comprising:

a system antenna (not shown) connected to an IF amplifier (81), reads on first amplifier; (Figure 4; col. 6, lines 53-55; col. 7, lines 49-55)

a system antenna (not shown) connected to a IF limiting amplifier (70), reads on second amplifier; (Figure 4; col. 6, lines 53-55; col. 7, lines 49-55)

an intermediate frequency stage (J2); (Figure 4)

a switch (83), reads on selector, being connected between the IF limiting amplifier and the IF amplifier and the intermediate frequency stage for selecting operation of the communication transceiver between the IF limiting amplifier and the IF amplifier (the transmit and receive paths).

Moe, however, fails to disclose a first antenna connected to a first amplifier and a second antenna connected to a second amplifier such that the selector connected between the first and second amplifiers and the intermediate frequency stage selects operation of the communications transceiver between the first and second antennas.

However, it is known in the art to replace a single antenna used for both the transmit and receive paths with separate transmit and receive antennas, reads on first and second antennas, and Examiner takes Official Notice as such.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Moe to include a first and a second antenna as the use of separate antennas for the

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transmit and receive paths versus the use of a single antenna for both the transmit and receive paths is a logical engineering preference.

Regarding claim 2, Moe discloses all the limitations of claim 1 and further discloses a communication transceiver wherein the IF amplifier (81) is an input amplifier for amplifying signals to be received by the antenna. (Figure 4)

Regarding claim 4, Moe discloses all the limitations of claim 1 and further discloses a communication transceiver wherein the second amplifier (70) is an output amplifier for amplifying signals to be transmitted by the antenna. (Figure 2)

Regarding claims 9 and 10, Moe discloses all the limitations of claim 1 and further discloses a communication transceiver further comprising a BPF (60) disposed between the antenna and the IF amplifier (81). (Figure 4, col. 6, lines 60-64)

Regarding claims 11 and 12, Moe discloses all the limitations of claim 1 and further discloses a communication transceiver further comprising a BPF (55) disposed between the antenna and the IF limiting amplifier (70). (Figure 4, col. 6, lines 60-64)

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bath et al. (hereafter, Bath), U.S. Patent No. 5,701,594.

Regarding claim 17, Bath discloses a communications transceiver, comprising:
an antenna (1) connected to a first amplifier (3); (Figure 1; col. 2, lines 5-11)

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an intermediate frequency, IF, stage (6) connected to a second amplifier (26); (Figure 1; col. 2, lines 14-16 and lines 45-46) and

switches (18, 19), reads on selector, disposed between the first amplifier (3) and the IF stage (6) and between the antenna (1) and the second amplifier (26) for selecting operation of the communications transceiver between the first and second amplifiers.

Bath, however, fails to disclose a first antenna connected to a first amplifier and a second antenna such that the selector is connected between the first amplifier and the IF stage and between the second antenna and the second amplifier for selecting operation of the communications transceiver between the first and second antennas.

However, it is known in the art to replace a single antenna used for both the transmit and receive paths with separate transmit and receive antennas, reads on first and second antennas, and Examiner takes Official Notice as such.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bath to include a first and a second antenna as the use of separate antennas for the transmit and receive paths versus the use of a single antenna for both the transmit and receive paths is a logical engineering preference.

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Allowable Subject Matter

9. Claims 7, 8, 14-16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 5, 6 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5 and 6, the prior art of record fails to disclose the limitations of claim 4, further comprising a third amplifier connected to the second amplifier, wherein the third amplifier amplifies the signals received by the second antenna. The prior art of record also fails to disclose the limitations of claim 5, further comprising a second selector connected between the second antenna and the second and third amplifiers for selecting connection of the second antenna between the second and third amplifiers.

Regarding claims 7 and 8, the prior art of record fails to disclose the communications transceiver of claim 1, further comprising a filter disposed between the selector and the IF stage (claim 7). The prior art of record also fails to disclose the limitations of claim 7 wherein the filter is a low-pass filter (claim 8).

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Regarding claim 13, the prior art of record fails to disclose the limitations of claim 6, further comprising a filter disposed between the second antenna and the second selector.

Regarding claims 14 and 15, the prior art of record fails to disclose the communications transceiver of claim 1, wherein the first amplifier includes an enable control for selectively activating the first amplifier (claim 14) and wherein the second amplifier includes an enable control for selectively activating the second amplifier (claim 15).

Regarding claim 16, the prior art of record fails to disclose the communications transceiver of claim 5, wherein the third amplifier includes an enable control for selectively activating the third amplifier.

Regarding claims 18-20, the prior art of record fails to disclose the communications transceiver of claim 17, wherein the first amplifier includes a feedback loop for altering the operational characteristics of the first amplifier (claim 18). The prior art also fails to disclose the limitations of claim 18, wherein the feedback loop includes a switch for selectively activating the feedback loop (claim 19) or wherein the feedback loop is a closed loop (claim 20).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kitakubo	U.S. Patent No. 5,822,684	10/13/1998
Seki et al.	U.S. Patent No. 5,805,643	09/08/1998
Onishi et al.	U.S. Patent No. 5,335,251	08/02/1994

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy M. Legree whose telephone number is (703) 305-3859. The examiner can normally be reached on Monday-Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached on (703) 305-4778.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


or faxed to:

(703)308-9051, (for formal communication intended for entry)

Or:

(703)305-9508, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive
Arlington, VA., Sixth Floor (Receptionist).


Tracy M. Legree
March 23, 2000